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State of Utah

DEPARTMENT OF NATURAL RESOURCES
Division of Water Rights

MICHAEL R. STYLER
Executive Director

KENT L. JONES
State Engineer/Division Director

July 16, 2012

CARL CLARK
NORTH UTAH COUNTY
WATER CONSERVANCY DIST
75 NORTH CENTER STREET
AMERICAN FORK, UT 84003

DIVISION OF WATER RIGHTS - DAM SAFETY SECTION
DAM INSPECTION REPORT – 2012

Dam Name & Number	**Northern Utah County – Tibble Fork, UT00299**		
Date	July 12, 2012	Dam Type	Zoned Earthfill
Storage Level	6378.5ft MSL	Hazard Rating	High
Outlet Flow	0 c.f.s.	Purpose of Inspection	Annual Inspection
Spillway Flow	75 c.f.s.	Weather	Sunny & Clear, 68°F

Representatives at the Inspection:

Name	*Representing*
Everett Taylor, Logan Riley	UT Division of Water Rights, Dam Safety
John Jacobs, Kent Evans, Lynn Walker, Alan Jenkins, Dick Mecham, Hunt Willaby, Karl Clark, Jay Franson	Northern Utah County Water Conservancy District
Jim Ireland	NPS, Timpanogos Cave
Brent Davis, Anna Vargo, Norm Evanstead	NRCS

Checklist Item	Comments:
-	None.

Checklist Item	Immediate Action Required:
-	None.

Checklist Item	Necessary Action, Maintenance and/or Repair:
2., 3.	Remove willows from the upstream slope to the right of the spillway intake. Remove sagebrush from the downstream slope. Exterminate burrowing rodents.

8.	Monitor the wet area on the right downstream channel bank, near the toe drain outfall, for increases in flow or turbidity.
12.	Continue to clear the trash rack of the principal spillway intake as necessary. The intake had been cleaned prior to this inspection.
20.	Operate the low level gate annually. Generally, the fall is a good time to do this.
24.	The actual depth of piezometer 1-B is in question. The hole was drilled to a depth of 75 feet with the drill log indicating the piezometer was placed to a depth of 55 feet. Two (2) individuals were able to reach a depth of 135 feet with their well probes though clay mud was encountered at a depth of 5.5 feet. Problems with this piezometer need to be resolved in conjunction with Dam Safety and NRCS.
25.	Lower portions of the toe drain system were cleaned of tree roots in March of 2012. Cleaning also took place in 2005 and 2009. It appears that the drain system needs to be cleaned every three years. This should be done and a section describing this added to the standard operating procedures for the dam.

EAP Review (High and Moderate Hazard only):	Yes	No
Does the Owner have a current copy of the EAP?	☒	☐
Are the notification flowcharts updated (i.e., names, phone numbers, etc.)?	☒	☐
Are the Inundation Maps included and legible?	☒	☐
Are copies of the EAP distributed to the appropriate agencies/people?	☒	☐
Date of latest revision: August 1, 2012		
Other comments: 1. None.		

Embankment	N/A	Not Inspected	Inundated	Good	Monitor	Maintenance	Critical
1. Crest	---	---	☐	☒	☐	☐	☐
2. Upstream Slope	---	---	☐	☒	☐	☒	☐
3. Downstream Slope	---	---	☐	☒	☐	☒	☐
4. Groins	---	---	☐	☒	☐	☐	☐

Abutment/Foundation	N/A	Not Inspected	Inundated	Good	Monitor	Maintenance	Critical
5. Left Abutment	---	---	☐	☒	☐	☐	☐
6. Right Abutment	---	---	☐	☒	☐	☐	☐
7. Upstream Toe	---	---	☒	☐	☐	☐	☐
8. Downstream Toe	---	---	☐	☒	☒	☐	☐

Reservoir Basin	N/A	Not Inspected	Inundated	Good	Monitor	Maintenance	Critical
9. Shore Stability	---	☐	☐	☒	☐	☐	☐
10. Reservoir Bottom	---	☐	☒	☐	☐	☐	☐

Spillway	N/A	Not Inspected	Inundated	Good	Monitor	Maintenance	Critical
11. Freeboard	☐	---	☐	☒	☐	☐	☐
12. Intake	☐	---	☐	☒	☐	☐	☐
13. Concrete Structures	☐	---	☐	☒	☐	☐	☐
14. Stilling Basin	☐	---	☐	☒	☐	☐	☐
15. Outfall Channel	☐	---	☐	☒	☐	☐	☐

Outlet	N/A	Not Inspected	Inundated	Good	Monitor	Maintenance	Critical
16. Conduit	☐	☒	☐	☐	☐	☐	☐
17. Intake	☐	---	☒	☐	☐	☐	☐
18. Stilling Basin	☐	---	☐	☒	☐	☐	☐
19. Discharge Channel	☐	---	☐	☒	☐	☐	☐
20. Controls	☐	---	☐	☒	☐	☐	☐
21. Venting	☒	---	☐	☐	☐	☐	☐

Instrumentation	N/A	Not Inspected	Inundated	Good	Monitor	Maintenance	Critical
22. Monuments	☐	---	☐	☒	☐	☐	☐
23. Staff Gage	☒	---	☐	☐	☐	☐	☐
24. Piezometers	☐	---	☐	☒	☐	☒	☐
25. Drains	☐	---	☐	☒	☐	☐	☐
26. Other	☒	---	☐	☐	☐	☐	☐

Photos:

Photo 1: Willows on the upstream slope left of spillway intake need to be removed.

Photo 2: Example of rodent hole on downstream slope.

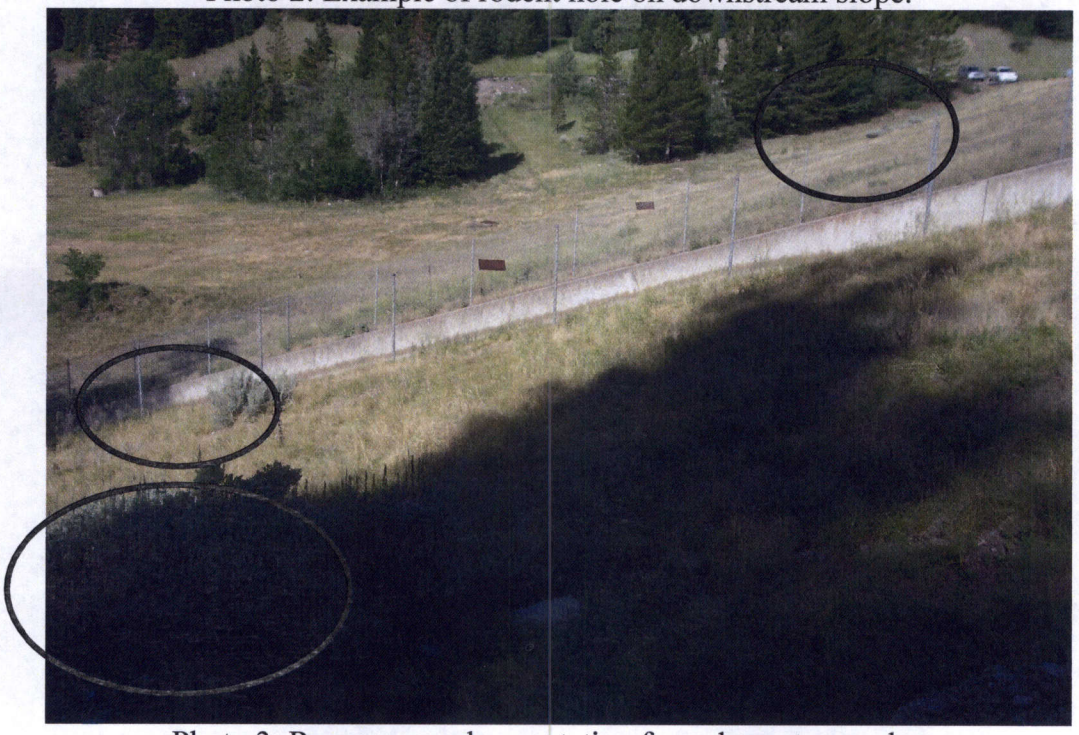

Photo 3: Remove woody vegetation from downstream slope

Your cooperation is appreciated. If you have any questions, please feel free to contact Everett Taylor at (801) 538-7372.

Sincerely,

David K. Marble, P.E.
Assistant State Engineer

DKM/jm

pc: Teresa Wilhelmsen - Water Rights Regional Engineer
Kevin W Bourne, P.E. US Forest Service
Division of Water Resources
Craig Walker Division of Wildlife Resources
Uinta-Wasatch-Cache National Forest
Bronson Smart, P.E. State Conservation Engineer NRCS
John Jacobs North Utah County Conservancy District
Superintendent Timpanogos Cave National Monument
Craig Searle Utah County Engineers Office